

## Simulation of the Intraseasonal Variability Over the Eastern Pacific ITCZ in Climate Models

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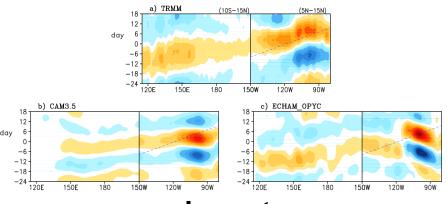
### **Objectives**

- Evaluate boreal summer intraseasonal and quasi-biweekly rainfall variability over the tropical East Pacific in climate models
- Investigate model physics to determine configurations favorable for the simulation of these modes of variability

#### **Approach**

- Analyze 6 atmospheric models and 3 coupled models
- Use extended EOF analysis to evaluate how well the models simulate the two leading modes of 10-90 variability
- Evaluate the life-cycle and propagation characteristics

#### Examples of eastward propagation



### **Impact**

- Four models simulate the eastward and northward propagation of the intraseasonal mode, but the period is too fast
- Convective parameterization that permits the build-up of sufficient tropospheric moisture yields improved simulation of these modes of variability
- High horizontal resolution appears to be favorable for simulating the quasibiweekly mode

